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Research Watch is an initiative by the residents of Case Western Reserve University/University Hospitals Case Medical Center, and it aims to inform psychiatry residents and faculty of notable articles published in prominent research and educational journals.

Journals Covered:

- * American Journal of Psychiatry (AJP)
- * AJP – Resident’s Journal (RJ)
- * JAMA Psychiatry (JAMA-P)
- * Lancet Psychiatry (LP)
- * Journal of the American Academy of Child & Adolescent Psychiatry (JAACAP)
- * Current Psychiatry (CP)
- * International Journal of Psychoanalysis & The American Journal of Psychoanalysis (Psychoanalysis)
- * Miscellaneous: JAMA , JAMA Pediatrics, Directions in Psychiatry

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Highlights

- A family based intervention may be effective in preventing onset of anxiety disorders in the offspring of anxious parents. (AJP)
- Antipsychotics appear to be associated with diabetes mellitus only in those without a family history of diabetes mellitus. Treatment does not appear to be associated with additional risk of diabetes mellitus in those with a family history. (LP)
- Risperidone appears to be more useful than lithium or divalproex for children with bipolar I disorder and other comorbid conditions who are nonresponders or partial responders to an initial antimanic medication trial. (JAACAP)

New Research on Lithium

- Lithium use does not appear to have an increased risk of end-stage CKD but anticonvulsants in bipolar disorder do. (JAMA-P)
- Stable lithium maintenance therapy (without episodes of toxicity) appears to have no effect on glomerular filtration rate, but episodes of toxicity are a predictor of GFR decline. (LP)

Resident Mental Health:

- Prevalence of depression or depressive symptoms among resident physicians is reported to be 28.8%, ranging from 20.9% to 43.2%. (JAMA)
- Web-based cognitive behavioral therapy appears to be effective in prevention of suicidal ideation in medical interns (JAMA-P)

Antidepressant Use During Pregnancy:

- Mothers with psychiatric diagnoses treated with SSRIs during pregnancy appear to have a lower risk for preterm birth and cesarean section compared to mothers with untreated psychiatric diagnoses. (AJP)

- Use of antidepressants during the second and/or third trimester may be associated with increased risk of autism spectrum disorders (JAMA Pediatrics)

The American Journal of Psychiatry

Volume 172, Issue 12

Extended-Release Guanfacine for Hyperactivity in Children with Autism Spectrum Disorder

Scahill, et al.

This randomized clinical trial assigned 82 pediatric patients with Autism Spectrum Disorder to 8 weeks of treatment with extended release guanfacine (modal dose of 3mg/day, range 1-4mg/day) or placebo to assess whether extended release guanfacine would improve symptoms of hyperactivity, impulsivity and distractibility. Guanfacine found to be safe and effective in reducing these symptoms in children with ASD. Side effects noted include drowsiness, fatigue, decreased appetite and decline in blood pressure.

Preventing Onset of Anxiety Disorders in Offspring of Anxious Parents: A Randomized Controlled Trial of Family-Based Intervention

Ginsburg, et al.

This cohort study of 136 families where one parent met criteria for an anxiety disorder and one child ages 6-13 years did not meet criteria for an anxiety disorder were randomized to receive either family based intervention or information-monitoring control. The results found that the group involved in the family based intervention had a significant reduction in the 1 year incidence of anxiety disorders among the offspring of anxious parents compared to their control counterparts (5% versus 31%).

Pregnancy Complications Following Prenatal Exposure to SSRIs or Maternal Psychiatric Disorders: Results from Population-Based National Register Data

Malm, et al.

This was a population-based prospective birth cohort study using national register data in Finland. Pregnancies were classified as exposed to SSRIs, unexposed to SSRIs but with psychiatric diagnoses, and unexposed to medications and psychiatric diagnoses. Offspring of mothers who received SSRI prescriptions during pregnancy had a lower risk for late preterm birth (odds ratio=0.84), for very preterm birth (odds ratio=0.52), and for cesarean section (odds ratio=0.70) compared with offspring of mothers unexposed to medications but with psychiatric disorders. In contrast, in SSRI-treated mothers, the risk was higher for offspring neonatal complications, including low Apgar score and monitoring in a neonatal care unit. This study provides evidence for a protective role of SSRIs on some deleterious reproductive outcomes associated with psychiatric diagnosis.

Ziprasidone Augmentation of Escitalopram for Major Depressive Disorder: Efficacy Results from a Randomized, Double-Blind, Placebo-Controlled Study.

Papakostas, et al.

This double-blind, placebo-controlled trial randomized 139 outpatients with persistent symptoms of major depression after an 8 week open label trial of escitalopram to receive adjunctive ziprasidone or adjunctive placebo. Patients were followed for 8 weekly assessments and clinical response was determined as a >50% score reduction in the Hamilton Depression Rating Scale. Results showed a rate of greater clinical response in the adjunct ziprasidone group versus the adjunct placebo group, 35.2% and 20.5% respectively.

The American Journal of Psychiatry - Resident's Journal

Volume 10, Issue 12

A Review of the Neurological Features and Diagnosis of Psychogenic Nonepileptic Seizures

Alapati D

The similarities between the clinical manifestations of psychogenic nonepileptic seizures (PNES) and different classes of epileptic seizures make it difficult to differentiate between the two. Ictal features highly suggestive of PNES are: thrashing/violent movements of entire body, side-to-side head movements and side-to-side body turning, forward pelvic thrusting, fluctuating course with pauses in motor activity, eye closure, upper and lower extremity out of phase movements, memory recall, ictal crying, and long duration. Video EEG is considered the gold standard for diagnosing PNES and differentiating between PNES and epileptic seizure, but not all clinicians may use video EEG. Although behavioral therapies figure prominently in the management of PNES, there is a lack of randomized and non-randomized trials demonstrating their effectiveness and a dearth of high-quality evidence supporting their use in the treatment of PNES.

The Pharmacological Treatment of Obesity: A Literature Review

Thomas C

Management of obesity necessitates lifestyle modifications through dietary changes, physical activity, and behavior modification. Due to the growing obesity rates and high rates of relapse through lifestyle changes alone, medications can be helpful for short- and long-term weight loss strategies. Currently, five agents have been approved by the Food and Drug Administration for weight management: orlistat, lorcaserin, phentermine/topiramate extended-release formulation, bupropion/naltrexone extended release formulation, and liraglutide injection.

Grasping for Words: A Case Series and Comparison of Language Loss in Frontotemporal Dementia vs. Early-Onset Alzheimer's Disease

Yam, et al.

Aphasias provide a subtle avenue for exploration of etiologies, functional loss, and prognosis of dementias. Clinicians should have a high index of suspicion for neurologic findings in the context of language loss and poor functioning in home and occupational settings. In neurocognitive disorder due to

Alzheimer's disease, there is impaired word retrieval and loss of complex words, but language fluency is maintained until late in the illness. Other dementias that cause aphasia include subtypes of neurocognitive disorder due to frontotemporal lobar degeneration. The subtype primary progressive aphasia includes three types: progressive nonfluent aphasia, logopenic aphasia, and semantic dementia.

Also in this issue of Residents' Journal: **A Review of the American Cancer Society Screening Guidelines** and **A Review of the American Diabetes Association 2015 Guidelines**. See journal issue for details.

JAMA Psychiatry

Volume 72, Issue 12

Premature Mortality Among Adults With Schizophrenia in the United States

Olson, et al.

Adults in the United States with schizophrenia aged 20-64, when controlled for age, sex, race/ethnicity, and geographic region, are more likely to die prematurely than the control population. Causes of increased mortality were often modifiable and include cardiovascular and respiratory disease, as well as non-suicidal substance abuse.

Use of Lithium and Anticonvulsants and the Rate of Chronic Kidney Disease - A Nationwide Population-Based Study

Kissing, et al.

When not considering diagnosis, the use of lithium was associated with an increased rate of CKD, while anticonvulsants, antipsychotics and antidepressants was not. However, none of the above medication groups are associated with end-stage CKD compared with the general population (defined as long term dialysis or renal transplantation). However, in patients with bipolar disorder, lithium and anticonvulsants (and not antipsychotics or antidepressants) were associated with an increased rate of CKD, and only anticonvulsants (NOT lithium) were associated with an increased rate of end-stage CKD.

Web-Based Cognitive Behavioral Therapy Intervention for the Prevention of Suicidal Ideation in Medical Interns - A Randomized Control Trial

Guille, et al.

A RCT was performed in which medical interns were assigned to either a web-based CBT group or an attention control group. Both groups were e-mailed throughout the year with information on depression, suicidal thinking and local mental health professionals and were monitored at 3-month intervals throughout intern year with the Patient Health Questionnaire-9. Interns in the web based CBT group, which included study activities for 30 minutes per week for the 4 weeks prior to starting intern year, were less likely to endorse suicidal ideation.

Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013

Hasin, et al.

The past year prevalence of marijuana use between 2001-2002 was 4.1%, while between 2012-2013 it was 9.5% ($p < .05$). In addition, the past year prevalence of marijuana use disorder (by DSM-IV criteria) also increased from 1.5% between 2001-2002 to 2.9% between 2012-2013 ($p < .05$). However, the risk for marijuana use disorder did not increase amongst users and thus the increase in marijuana use disorder is likely attributable to the increase in prevalence of users.

Ventral Striatal Activation During Reward Processing in Psychosis - A Neurofunctional Meta-Analysis

Radua, et al.

Functional MRI studies that compared ventral striatal activity during monetary reward processing between patients with schizophrenia spectrum disorders (or clinical or genetic high-risk state for psychosis) and healthy controls were reviewed. This meta-analysis provided evidence that patients with psychosis demonstrate ventral striatal hypoactivation during reward anticipation, but more studies are needed to draw valid conclusions.

The Lancet Psychiatry

Volume 2, Issue 12

Long-term effect of lithium maintenance therapy on estimated glomerular filtration rate in patients with affective disorders: a population-based cohort study

Clos, et al.

This population-based cohort study suggests no effect of stable lithium maintenance therapy (lithium levels in therapeutic range) on the rate of change in eGFR over time. Episodes of lithium toxicity were, however, a significant predictor for eGFR decline. The results contradict the idea that long-term lithium therapy is associated with nephrotoxicity in the absence of episodes of acute intoxication.

Effect of age, family history of diabetes, and antipsychotic drug treatment on risk of diabetes in people with psychosis: a population-based cross-sectional study

Foley, et al.

Using logistic regression and data from the 2010 Australian National Survey of Psychosis, authors modelled the association of diabetes mellitus with age, family history of diabetes mellitus, and current antipsychotic drug treatment. After adjustment for older age, compared with not taking antipsychotic drugs, antipsychotic drug treatment was associated with diabetes mellitus only in those without a family history of diabetes mellitus. Antipsychotic drug treatment was not associated with additional risk of diabetes mellitus in those with a family history.

Anorexia nervosa: aetiology, assessment, and treatment

Zipfel, et al.

Genetic factors influence risk, psychosocial and interpersonal factors can trigger onset, and changes in neural networks can sustain the illness. Specialized family-based interventions are of benefit, especially in adolescents. No specific approach has shown clear superiority for treatment of adults with anorexia nervosa, suggesting a combination of re-nourishment and anorexia nervosa-specific psychotherapy is most effective.

Journal of the American Academy of Child and Adolescent Psychiatry

Volume 54, Issue 12

Continued Effectiveness of Relapse Prevention Cognitive-Behavioral Therapy Following Fluoxetine Treatment in Youth With Major Depressive Disorder

Emslie, et al.

After successful treatment of MDD with fluoxetine for 6 weeks, responders were randomized to continued medication management alone (MM) or continued medication management plus RP-CBT (MM+CBT) for an additional 6 months. Long-term follow-up assessments were conducted at weeks 52 and 78. The estimated probability of relapse during the 78-week period was lower with MM+CBT than MM only (36% versus 62%). Mean time to relapse was also significantly longer with MM+CBT compared to MM alone by approximately 3 months ($p = .007$).

Depression and Suicidality Outcomes in the Treatment of Early Age Mania Study

Salpekar, et al.

The Treatment of Early Age Mania (TEAM) study is a multicenter, prospective, randomized, masked comparison of divalproex sodium (VAL), lithium carbonate (LI), and risperidone (RISP) in an 8-week parallel clinical trial. Depressive symptoms, present in the acutely manic or mixed phase of pediatric bipolar disorder, improved with all 3 medications, though RISP appeared to yield more rapid improvement than LI or VAL and was superior using a global categorical outcome.

Treatment of Early-Age Mania: Outcomes for Partial and Nonresponders to Initial Treatment

Walkup, et al.

TEAM is a randomized, controlled trial of individuals aged 6 to 15 years with DSM-IV bipolar I disorder (mixed or manic phase). Participants were treated with either divalproex sodium, lithium carbonate, or risperidone in an 8-week trial period. Nonresponders were randomly assigned to 1 of the other 2 antimanic medications and cross-tapered. Partial responders were randomly assigned to 1 of 2 other antimanic medications as an add-on to their initial medication. Response rate for children switched to risperidone (47.6%) was higher than for those switched to either lithium (12.8%) or divalproex (17.2%).

Response rate for partial responders who added risperidone (53.3%) was higher than for those who added divalproex (0%; $p = .0002$) and trended higher for lithium (26.7%; $p = .07$).

Asenapine for the Acute Treatment of Pediatric Manic or Mixed Episode of Bipolar I Disorder

Findling, et al.

In this double-blind, placebo-controlled, trial, patients aged 10 to 17 years with bipolar I disorder currently in manic or mixed episodes were randomized 1:1:1:1 to placebo, asenapine 2.5, 5, or 10 mg b.i.d. (twice daily). Primary efficacy measure was change from baseline in Young-Mania Rating Scale (YMRS) total score at day 21. All asenapine doses versus placebo were superior based on change in YMRS at day 21. Asenapine was generally well tolerated in patients aged 10 to 17 years with bipolar I disorder in manic or mixed states. Increases in weight and fasting insulin were associated with asenapine.

Current Psychiatry

Volume 14, Issue 12

Preventing drinking relapse in patients with alcoholic liver disease

Wider, et al.

Prescribers are fearful to recommend medications for Alcohol Use Disorder fearing that underlying liver disease will worsen or that they will cause other medical complications. Women and binge drinkers in particular are at an increased risk for developing alcoholic liver disease; patients hospitalized with alcoholic hepatitis have a 10-30% risk of inpatient mortality and a 1-2 month post discharge survival of 50-65%. There is no agreed-upon algorithm or safety profile to guide decision making when treated AUD in patients with alcoholic liver disease. See full article for chart describing treatment recommendations.

Think beyond Prazosin when treating nightmares in PTSD

Scarff J

Consider the following alternatives to Prazosin when treating nightmares associated with PTSD

-Alpha 2 agonists (Clonidine and guanfacine): decrease noradrenergic activity and less likely to cause sedation. Case series showed fewer nightmares reported at 0.2 to 0.6mg Clonidine and 2mg of Guanfacine. Monitor for hypotension, excess sedation, dry mouth, and rebound hypertension.

-Cyproheptadine: antagonism of serotonin 2A receptors with a decrease in nightmares reported at dosage from 2 to 24mg. Monitor for sedation and confusion. May also reduce sexual side effects associated with serotonergic medications.

-Topiramate: approved for treatment of epilepsy and migraine headaches. Decrease in nightmares seen at dosages of 75 to 100mg. Monitor for anorexia, paresthesias, and cognitive impairment.

-Gabapentin: approved to treat seizures and postherpetic neuralgia. Mean dose of 1300mg per day showed decrease in frequency or intensity of nightmares. Monitor for sedation, dizziness, mood changes and weight gain.

A decade after the CATIE study, the focus has shifted from effectiveness to neuroprotection

Nasrallah H

In this editorial, Dr Nasrallah discusses that although studies like CATIE show similar clinical effectiveness between first and second generation antipsychotics, the two classes exert very different neurobiological effects, such that typical antipsychotics appear to be neurotoxic and atypical antipsychotics appear to be neuroprotective.

The American Journal of Psychoanalysis

Volume 75, Issue 4 (December 2015)

Indian Caste System: Historical and Psychoanalytic Views

Vallabhaneni MR

Vallabhaneni surveys the development of and various attitudes towards the Indian caste system. He goes on to integrate the castes within Freudian ideas about group psychology and Kleinian ideas splitting as well as projective identification. It concludes by suggesting various ameliorative strategies for problems associated with the caste system.

Communism and the Trauma of its Collapse Revisited

Schmidt-Löw-Beer C, et al.

The writers examine the social and psychic impacts associated with European Communist rule and its collapse. Drawing on an empirical study from 1996, it focuses specifically on the personality structure of adolescents in Austria and Russia. Integrating the research findings with psychoanalytic theory, the writers explore the development of pervasive anxiety, conflict avoidance, and feelings of loss as being prominent in those adolescents who grew up in Russia.

Female Sexuality, Nationalism and Large Group Identity

Gonzalez-Torres & Fernández-Rivas

The writers evaluate two concurrent phenomena – on the one hand the development of various nationalist movements worldwide and on the other the popularity of erotic fiction with a sadomasochistic orientation. They suggest that the erotic fiction allows for some integration of aggression into sexual life while at the same time challenging liberal conceptions about equality in gender roles as well as conservative ideals of control over passion. They go on to suggest that the simultaneous developments of nationalist movements and the popularity of sadomasochistic erotic fiction represent different responses to perceived threats to the social structure by female sexuality.

Cyprus Turkish Fairy Tales: Glimpse of a Harmonious Past

Beyoğlu E

In this paper Beyoğlu explores fairy tales from the Muslim minority and the Orthodox Christian majority living in Cyprus in the hopes that such close reading will support peaceful co-existence of similar communities – where different large-group identities live in close proximity.

Miscellaneous

Antidepressant Use During Pregnancy and the Risk of Autism Spectrum Disorder in Children

Boukhris, et al.

JAMA Pediatrics. Published online December 14, 2015. doi:10.1001/jamapediatrics.2015.3356

Data analysis from the Québec Pregnancy/Children Cohort revealed that after adjusting for potential confounders, use of antidepressants during the second and/or third trimester was associated with increased risk of autism spectrum disorder (ASD), with adjusted hazard ratio of 1.87 (95% CI 1.15-3.04) for all antidepressants and 2.17 (95% CI 1.20-3.93) for SSRIs. The risk was persistent even after taking into account maternal history of depression.

Prevalence of Depression and Depressive Symptoms Among Resident Physicians - A Systematic Review and Meta-analysis

Mata, et al.

JAMA. 2015;314(22):2373-2383. doi:10.1001/jama.2015.15845.

In this systematic review, the prevalence of depression or depressive symptoms among resident physicians was reported to be 28.8%, ranging from 20.9% to 43.2% depending on the instrument used, and increasing with calendar year. No statistically significant differences were observed between cross-sectional vs longitudinal studies, studies of only interns vs only upper-level residents, or studies of nonsurgical vs both nonsurgical and surgical residents.

Psychiatric Disorder and Psychotropic Treatment in the Postpartum Period.

Directions in Psychiatry 2015; 35(3):229-245

Shah A, Aftab A, & Latorre S (*Aftab & Latorre PGY2 UH/CW*)

This is a CME based article in which readers are to gain a better understanding of the prevalence of psychiatric disorders in post-partum women, the negative effects of psychiatric disorders on mothers and infants, and safety concerns regarding the use of psychotropic medications during breastfeeding as well as general principals of psychotropic use during lactation. This article also discusses the recent implementation of the pregnancy and lactation labeling rule (PLLR). Some key learning points include:

-Prevalence of psychiatric disorders during pregnancy and in the postpartum period are comparable to the prevalence of the general population. The first month after childbirth is particularly high risk for onset of depression and psychiatric admission.

-Detrimental effects of (untreated) psychiatric illness on the mother and infant include a negative impact on bonding, reduced cognitive and language development, insecure attachment, and increased risk of depression in child during adolescence.

-All psychotropic medications are secreted in breast milk, but the majority are present only in low concentrations and can be used safely in lactating mothers. Medications that warrant further caution include fluoxetine, doxepin, MAOIs, lithium, and benzodiazepines.

Research Watch offers a unique publishing opportunity.

***Research Watch* is accepting submissions of commentary pieces in which authors can critically analyze and discuss recently published studies (within the last 6 months) related to psychiatry.**

Guidelines:

- Manuscripts can be authored by medical students, psychiatry residents, psychiatry fellows, or pharmacy students. The invitation is open to all medical schools, residency programs, fellowship programs in USA. Manuscripts authored by faculty members will not be considered. Guidance from faculty members can be acknowledged at the end of the manuscript.
- Up to 2 authors per manuscript are allowed.
- The manuscripts are limited to 500 words (main text, excluding references).
- Up to 5 references are allowed. References should be in Vancouver style.
- No abstract is required.
- Title Page should contain: Title, Author information and affiliation, word count, declaration of conflict of interest.
- One figure or one table is permitted.
- Generic rather than trade names of drugs should be used.
- Manuscripts should be submitted via email to Chief Curator Awais Aftab at muhammad.aftab@uhhospitals.org. Manuscript should be in word document or pdf format.

Review Process:

Submissions will be reviewed and edited by the Chief Curator Awais Aftab. Any questions, clarifications or decisions will be communicated to the corresponding author. Dr Keming Gao (Associate Professor, Psychiatry, CWRU School of Medicine) will serve as faculty advisor.

Please contact Chief Curator Awais Aftab with any queries.